

1 42. An electrical structure, comprising:
2 a first substrate having a conductive pad;
3 a second substrate having a conductive pad; and
4 a conductive button, comprising: a conductive wiring helically wound circumferentially
5 around a dielectric core; and an outer dielectric jacket around the conductive wiring, wherein at
6 least two end contacts at a first end of the conductive button are in mechanical and electrical
7 contact with the conductive pad of the first substrate, wherein at least two end contacts at a
8 second end of the conductive button are in mechanical and electrical contact with the conductive
9 pad of the second substrate, wherein the at least two end contacts at the first end of the
10 conductive button are solderably coupled to the conductive pad of the first substrate, and wherein
11 the at least two end contacts at the second end of the conductive button are solderably coupled to
12 the conductive pad of the second substrate.

1 43. A method for forming an electrical structure; comprising:
2 providing a dielectric core;
3 helically winding a conductive wiring circumferentially around the dielectric core; and
4 cutting at an angle to an axis of the dielectric core, through the conductive wiring and
5 through the dielectric core, at two locations along the axis, leaving a conductive button between
6 the two location as having a first end and a second end, wherein the conductive wiring terminates
7 in at least two end contacts at the first end, and wherein the conductive wiring terminates in at
8 least two end contacts at the second end.

1 44. The method of claim 43, wherein the helically winding includes braiding.

1 45. The method of claim 43, wherein the helically winding includes serving.

1 46. The method of claim 43, wherein the helically winding includes helically winding in no more
2 than one rotational direction, and wherein the one rotational direction is selected from the group
3 consisting of a clockwise direction and a counter clockwise direction.

1 47. The method of claim 43, further comprising forming axial grooves along an outer surface of
2 the dielectric core.

1 48. The method of claim 43, further comprising forming an axial through hole at a radial center
2 of the dielectric core.

END